Abstract of the Disclosure

Methods are described that enhance pointer analysis for programs. Whereas previous methods are constrained by the extremes of an inverse relationship between time and information, the present methods selectively unify information so as to allow a desired level of analytical decision within a desired duration of analysis. One aspect of the present invention includes selectively retaining information at a first order of indirection based on variables in an assignment statement while unifying information at subsequent orders of indirection. The methods are used for pointer variables, but are equally useful to function definitions, function calls, function pointers, indirect function calls, and others. The methods may be used in client analysis tools such as code browsers and slicing tools.

"Express Mail" mailing label number: EL510347740US

Date of Deposit: January 21 2000

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

Printed Name Shawn L. Thise

Signature